

## In this Issue:

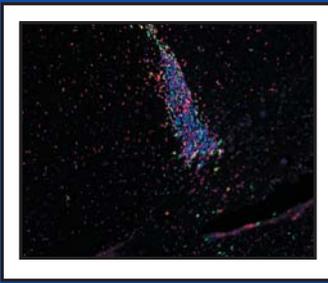
### News & Notes

NIH Announces New Transformative R01 Program .....	2
NIH Launches Animal Research Web Site .....	2

### Funding Opportunities

Ancillary Studies in Immunomodulation Clinical Trials .....	3
Chronic Fatigue Syndrome .....	3
Exceptional Unconventional Research Enabling Knowledge Acceleration .....	3
Fogarty International Research Collaboration .....	3
Human Microbiome Research .....	4
Methodology and Measurement in the Behavioral and Social Sciences .....	4
Millennium Promise Awards .....	4
National Centers for Biomedical Computing .....	4
National Research Service Awards .....	5
Neurological Sciences Academic Development Awards .....	5
Novel Lentiviral Models of HIV Neuropathogenesis .....	5
Primary Immunodeficiency Diseases .....	5
Research Partnerships to Improve Functional Outcomes .....	6
Research Supplements .....	6
Technological Innovations for Interdisciplinary Research .....	6
Translational Research .....	7

*NINDS Notes* is published 3 times a year and consists of summaries of NINDS's current funding announcements and requests for volunteers for clinical trials. *Notes* is of primary importance to scientists, physicians, and research directors with an interest in neuroscience.



*The Regenerative Potential of the Brain*  
by Dr. Andreas Androutsellis-Theotokis,  
NINDS

# News & Notes

## NIH Announces New Transformative R01 Program

NIH announces the Transformative R01 (T-R01), a new program designed to support highly creative, “out-of-the-box” projects. The program is part of the NIH Roadmap—an innovative approach to accelerate fundamental discovery and translate that knowledge into effective prevention strategies and new treatments.



Unlike the traditional R01 funding mechanism, the T-R01 provides a more flexible and engaging avenue of support for scientists who are testing exceptionally novel, high risk, original, or unconventional concepts, and proposing truly transformative ideas and approaches to major contemporary challenges.

To be considered transformative, projects must have the potential to create or overturn fundamental scientific paradigms. Successful projects will have a major impact in a broad area of biomedical or behavioral research.

The program encourages projects in any area of research that falls within the NIH mission, especially those that fall in areas of highlighted need such as understanding and facilitating human behavior change, complex 3-dimensional tissue models, functional variation in mitochondria in disease, transitions from acute to chronic pain, formulation of novel protein capture reagents, and providing an evidence base for pharmacogenomics.

Letters of intent are due by December 26, 2008, and applications are due by January 29, 2009. For more information contact Dr. Kristin M. Abraham, Division of Strategic Coordination, OPASI, NIH at 301-594-8190 or [T\\_R01@mail.nih.gov](mailto:T_R01@mail.nih.gov), or visit <http://grants2.nih.gov/grants/guide/rfa-files/RFA-RM-08-029.html>.<sup>MM</sup>

## NIH Launches Animal Research Website

NIH recently launched a new website, “Medical Research with Animals: For Researchers and Institutions,” to support NIH-funded scientists who use animal models.

Vaccines, medicines, therapies, surgical interventions, and preventive health care are essential to maintaining high standards of health worldwide. Every day, NIH-funded scientists make advances that will lead to safe and useful drugs, therapies, and cures. These advances are due to many different kinds of research—from the laboratory, to computers, to animals—including testing in humans. Animal research contributes tremendously to the development of new and life-saving interventions, as well as to the overall understanding of human and animal physiology. Like all NIH-funded research, animal research must go through a strict peer review and approval process based on federal regulations to ensure the protection of animal welfare.



The new website offers information on the important role of animals in research and their contributions to the improvement of health and quality of life for both humans and animals. The goal is to provide key information to researchers who work daily to improve the Nation’s health, and to the public. For more information visit <http://grants.nih.gov/grants/policy/air/index.htm>.<sup>MM</sup>

# Funding Opportunities

## **Ancillary Studies in Immunomodulation Clinical Trials**

NINDS requests applications for ancillary studies in immunomodulation clinical trials. This announcement is made together with 3 other NIH components.

The initiative supports mechanistic studies in clinical trials of immunomodulatory interventions for immune system-mediated diseases, and preventative and therapeutic vaccines for non-HIV/AIDS infectious diseases. The goal is to include subjects and use samples from clinical trials for evaluating immunologic and other relevant parameters to study and define the underlying immunological mechanisms of intervention or vaccine, mechanisms of disease pathogenesis, biomarkers of disease activity and therapeutic effect, and mechanisms of human immunologic function.

Potential applicants should contact Dr. Annette Rothermel, Division of Allergy, Immunology, and Transplantation, National Institute of Allergy and Infectious Disease (NIAID), NIH; telephone: 301-496-7104; email: [arothermel@niaid.nih.gov](mailto:arothermel@niaid.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-08-011.html>.<sup>MM</sup>

## **Chronic Fatigue Syndrome**

NINDS encourages grant applications for research on the cause(s), diagnosis, pathophysiology, and treatment of chronic fatigue syndrome (CFS). This announcement is made together with 12 other NIH components and is supported by 2 funding mechanisms: R01 and R21.

CFS is a debilitating and complex syndrome that involves multiple body systems. It is characterized by profound fatigue that is not improved by bed rest and may be exacerbated or rekindled by physical or mental activity. No specific cause or diagnostic test has been identified for CFS. Innovative, well-designed studies are needed to provide a better understanding of the disorder, which will lead to improved diagnostic and intervention strategies.

Potential applicants should contact Dr. Linda Porter, program director, Systems and Cognitive Neuroscience Cluster, NINDS; telephone: 301-496-9964; email: [lp216a@nih.gov](mailto:lp216a@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-246.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-08-247.html>.<sup>MM</sup>

## **Exceptional Unconventional Research Enabling Knowledge Acceleration**

NINDS requests grant applications for exceptional, unconventional research enabling knowledge acceleration (EUREKA). This request for applications is made together with 8 other NIH components.

The EUREKA initiative supports exceptionally innovative research that, if successful, will have an unusually high impact on the areas of science that are germane to the mission of one or more of the participating NIH Institutes. EUREKA is for new projects, not for continuation of existing projects.

Potential applicants should contact Dr. Edmund Talley, program director, Channels, Synapses and Circuits Cluster, NINDS; telephone: 301-496-1917; email: [talleye@ninds.nih.gov](mailto:talleye@ninds.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-GM-09-008.html>.<sup>MM</sup>

## **Fogarty International Research Collaboration**

NINDS invites applications for the Fogarty International Research Collaboration Basic Biomedical (FIRCA-BB) Research Award program. This announcement is made together with 11 other NIH components.

The FIRCA-BB program supports collaborative basic biomedical research between NIH-supported scientists and investigators in low- to middle-income countries. All non-AIDS-related biomedical research topics that are supported by NINDS (including basic, clinical, and applied research) are eligible for this program. AIDS-related projects are funded by separate programs.

Potential applicants should contact Dr. Yuan Liu, chief, Office of International Activities, NINDS; telephone: 301-496-0012; email: [y15o@nih.gov](mailto:y15o@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-222.html>.<sup>MM</sup>

### **Human Microbiome Research**

NIH requests applications for studies of the ethical, legal, and social implications of human microbiome research—which is the study and application of the metagenomic analysis of the human microbiota.

This announcement is an NIH Roadmap Initiative. The NIH Roadmap is an innovative approach to accelerate fundamental discovery and translate that knowledge into effective prevention strategies and new treatments.

The complex and dynamic communities of microbes that are present on and within the human body (the human microbiota) are thought to profoundly influence human physiology, nutrition, immunity, and development. Disruption of community dynamics may play a role in triggering, or be affected by, disease or may interfere with normal development.

Potential applicants should contact Dr. Jean E. McEwen, Division of Extramural Research, National Human Genome Research Institute, NIH; telephone: 301-496-7531; email: [mcewenj@mail.nih.gov](mailto:mcewenj@mail.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-08-030.html>.<sup>NIH</sup>

### **Methodology and Measurement in the Behavioral and Social Sciences**

NINDS encourages grant applications aimed at improving and developing methodology and measurement in the behavioral and social sciences. This announcement is made together with 14 other NIH components and is supported by 3 funding mechanisms: R01, R21, and R03.

The behavioral and social sciences offer significant, fundamental insights into the comprehensive understanding of human health, including disease cause and treatment, and the promotion of health and well-being. This announcement encourages research to improve the quality and scientific power of data collected in the behavioral and social sciences through innovations in research design, data collection, measurement, and data analysis.

Potential applicants should contact Dr. Debra Babcock, program director, Systems and Cognitive Neuroscience Cluster, NINDS; telephone: 301-496-9964; email: [db390r@nih.gov](mailto:db390r@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-212.html>, <http://grants.nih.gov/grants/guide/pa-files/PAR-08-213.html>, or <http://grants.nih.gov/grants/guide/pa-files/PAR-08-214.html>.<sup>NIH</sup>

### **Millennium Promise Awards**

NINDS invites applications for millennium promise awards for the non-communicable chronic diseases research training program. This announcement is made together with 6 other NIH components.

Chronic non-communicable diseases are steadily increasing around the world, especially in low- and middle-income countries (LMICs). This training program is designed to build capacity for future research in LMICs in the fields of cancer, cerebrovascular disease including stroke, lung disease, environmental and lifestyle factors, obesity, and genetics.

Potential applicants should contact Dr. Aron Primack, Fogarty International Center (FIC), NIH; telephone: 301-496-4596; email: [aron\\_primack@nih.gov](mailto:aron_primack@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-175.html>.<sup>NIH</sup>

### **National Centers for Biomedical Computing**

NIH encourages applications for collaborations with National Centers for Biomedical Computing (NCBC).

This announcement is an NIH Roadmap Initiative and is supported by 2 funding mechanisms: R01 and R21. The NIH Roadmap is an innovative approach to accelerate fundamental discovery and translate that knowledge into effective prevention strategies and new treatments.

NCBCs are the hubs of a networked national effort to build the computational infrastructure for biomedical computing. The intention of these collaborations is to engage researchers to build an excellent biomedical computing environment by using the computational tools and biological and behavioral application drivers of the funded NCBCs as foundation stones.

Potential applicants should contact Dr. Yuan Liu, chief, Office of International Activities, NINDS; telephone: 301-496-0012; email: [y15o@nih.gov](mailto:y15o@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-184.html> or <http://grants.nih.gov/grants/guide/pa-files/PAR-08-183.html>.<sup>NIH</sup>

### **National Research Service Awards**

NINDS invites applications for Ruth L. Kirschstein National Research Service Award institutional research training grants. This announcement is made together with 21 other NIH components.

The primary objective of the awards is to prepare qualified individuals for careers that have a significant impact on the health-related research needs of the Nation. This program supports predoctoral, postdoctoral, and short-term research training programs at domestic institutions of higher education.

Potential applicants should contact Dr. Stephen Korn, director, Training and Career Development, NINDS; telephone: 301-496-4188; email: [korns@ninds.nih.gov](mailto:korns@ninds.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-226.html>.<sup>NIH</sup>

### **Neurological Sciences Academic Development Awards**

NINDS invites applications for Neurological Sciences Academic Development (NSAD) awards.

These awards are given to educational institutions or professional organizations to support career development for pediatric neurologists leading to research independence. Under the awards grantee institutions will select and appoint newly trained pediatric neurologists to the NSAD program. The program will support up to 3 research scholars for up to a maximum of 3 years, consisting of consecutive 12-month appointments. The program provides 5 years of potentially renewable support.

Application Receipt Dates: November 12, 2008 for resubmission and renewal applications; October 12, 2009 for new applications.

Potential applicants should contact Dr. Deborah Hirtz, program director, Clinical Trials Group, NINDS; telephone: 301-496-5821; email: [dh83f@nih.gov](mailto:dh83f@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-197.html>.<sup>NIH</sup>

### **Novel Lentiviral Models of HIV Neuropathogenesis**

NINDS invites grant applications to develop or refine novel lentiviral models of HIV neuropathogenesis. This announcement is made together with 3 other NIH components and is supported by 2 funding mechanisms: R01 and R21.

Recent advances in the development of the simian immunodeficiency virus model system highlight the power of animal models for studying the mechanisms underlying the pathology associated with lentiviral infection in the nervous system. These models will be key for developing therapies to treat individuals with neuroAIDS and for understanding the basic biology of infection with HIV/AIDS.

Potential applicants should contact Dr. May Wong, program director, Neural Environment Cluster, NINDS; telephone: 301-496-1431; email: [mw132k@nih.gov](mailto:mw132k@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAS-08-178.html> or <http://grants.nih.gov/grants/guide/pa-files/PAS-08-179.html>.<sup>NIH</sup>

### **Primary Immunodeficiency Diseases**

NINDS encourages grant applications for research on primary immunodeficiency diseases. This announcement is made together with 3 other NIH components.

Primary immunodeficiency diseases result from inherited defects in the immune system. While these diseases are rare, as a group they may affect 1 to 2 percent of the population and can range in severity from mild to life-threatening. Medical research in this field can provide pivotal information on the development and function of the human immune system, benefitting millions of people affected with these diseases.

Potential applicants should contact Dr. Ursula Utz, program director, Neural Environment Cluster, NINDS; telephone: 301-496-1431; email: [uu1p@nih.gov](mailto:uu1p@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-206.html>.<sup>NIH</sup>

### **Research Partnerships to Improve Functional Outcomes**

NINDS encourages applications for support of meetings, conferences, and networks that encourage research partnerships to improve functional outcomes. This announcement is made together with 5 other NIH components.

This initiative will support meetings and workshops that bring together investigative teams to develop appropriate research plans to address difficult problems of chronic disease and rehabilitation. Investigators who have the same interests in solving particular problems of rehabilitation and chronic disease (including mental disorders) and who have complementary research or clinical expertise or resources will be encouraged to team up to coordinate, exchange, and disseminate information or to explore or clarify a defined subject, problem or area of knowledge.

Potential applicants should contact Dr. Daofen Chen, program director, Systems and Cognitive Neuroscience Cluster, NINDS; telephone: 301-496-9964; email: [dc342b@nih.gov](mailto:dc342b@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-207.html>.<sup>MM</sup>

### **Research Supplements to Promote Diversity**

NIH and the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention invite applications for research supplements to promote diversity in health-related research. All NIH Institutes and Centers participate in this program.

NIH recognizes a unique and compelling need to promote diversity in the biomedical, behavioral, clinical, and social sciences workforce. NIH efforts to diversify the workforce will: lead to the recruitment of the most talented researchers from all groups; improve the quality of the educational and training environment; balance and broaden the perspective in setting research priorities; improve the ability to recruit subjects from diverse backgrounds into clinical research protocols; and improve the Nation's capacity to address and eliminate health disparities. This initiative provides funds for administrative supplements to support and recruit students, postdoctorates, and eligible investigators.

Potential applicants should contact Dr. Michelle Jones-London, program director, Office of Minority Health and Research, NINDS; telephone: 301-451-7966; email: [jonesmiche@ninds.nih.gov](mailto:jonesmiche@ninds.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-190.html>.<sup>MM</sup>

### **Supplements to Promote Re-Entry into Research Careers**

NIH invites applications for research supplements to promote re-entry into biomedical and behavioral research careers. All NIH Institutes and Centers participate in this program.

NIH realizes that there is a need to increase the number of underrepresented racial and ethnic groups, women, individuals with disabilities, and people from disadvantaged backgrounds in biomedical, behavioral, clinical, and social science research careers. Among the reasons for the low representation of women may be the fact that women bear a majority of the responsibilities surrounding child and family care. To address this issue, the re-entry program is designed to offer opportunities to women and men who have interrupted their research careers to care for children or parents or to attend to other family responsibilities. A second objective of the program is to mentor and guide those who receive support to reestablish careers in biomedical, behavioral, clinical, or social science research.

Potential applicants should contact Dr. Michelle Jones-London, program director, Office of Minority Health and Research, NINDS; telephone: 301-451-7966; email: [jonesmiche@ninds.nih.gov](mailto:jonesmiche@ninds.nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-191.html>.<sup>MM</sup>

### **Technological Innovations for Interdisciplinary Research**

NINDS invites small business innovation research and small business technology transfer applications to develop innovative technologies for research that integrates human social and/or behavioral science with other disciplines. This announcement is made together with 18 other NIH components and is supported by 2 funding mechanisms: R41/R42 and R43/R44.

The behavioral and social sciences offer significant, fundamental insights into the comprehensive understanding of human health and diseases. Integrating the scientific insights and technologies gleaned from behavioral and social sciences with approaches from other disciplines may further advance NIH's public health mission.

Potential applicants should contact Dr. Daofen Chen, program director, Systems and Cognitive Neuroscience Cluster, NINDS; telephone: 301-496-9964; email: [dc342b@nih.gov](mailto:dc342b@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-08-201.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-08-202.html>.<sup>MM</sup>

**Translational Research: Exploratory/Developmental Projects**

NINDS encourages applications for exploratory or developmental projects in translational research.

Translational research is the process of applying ideas, insights, and discoveries generated through basic scientific inquiry to the treatment or prevention of human disease. Remarkable insights have been made recently into the genetic, molecular, and cellular bases of neurological disease. NINDS encourages the translation of promising discoveries and available data on the nervous system into therapies for neurological disorders.

Potential applicants should contact Dr. Thomas Miller, program director, Technology Development Group, NINDS; telephone: 301-496-1779; email: [tm208y@nih.gov](mailto:tm208y@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-232.html>.<sup>NIH</sup>

**Translational Research: NINDS Cooperative Program**

NINDS invites applications for its cooperative program in translational research. This announcement is supported by 4 funding mechanisms: U01, U24, U44, and U54.

Opportunities for discovery and progress in treating neurological diseases have never been greater. Remarkable advances have been made recently in understanding the molecular and genetic bases of disease. The potential therapies offered by these scientific findings create an opportunity for basic, applied, and clinical scientists to combine and coordinate their efforts. Recent discoveries across a broad range of neuroscience research areas offer promising opportunities for treating neurological disorders. As part of its mission to reduce the burden of neurological disease, NINDS is committed to encouraging the translation of these discoveries into new treatments.

Potential applicants should contact Dr. Thomas Miller, program director, Technology Development Group, NINDS; telephone: 301-496-1779; email: [tm208y@nih.gov](mailto:tm208y@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-233.html>, <http://grants.nih.gov/grants/guide/pa-files/PAR-08-234.html>, <http://grants.nih.gov/grants/guide/pa-files/PAR-08-235.html>, or <http://grants.nih.gov/grants/guide/pa-files/PAR-08-236.html>.<sup>NIH</sup>

**Translational Research for Neuromuscular Disease**

NINDS and the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) invite grant applications for translational research in neuromuscular disease. This announcement is supported by 2 funding mechanisms: R21 and U01.

Neuromuscular diseases target the components of the motor unit—which is defined as the motoneuron, its axon, the neuromuscular junctions that it forms, and the skeletal muscle fibers that it innervates. These diseases represent a considerable clinical burden that is largely without effective therapies. Recent discoveries offer promising opportunities for treating neuromuscular diseases.

Potential applicants should contact Dr. John Porter, program director, Neurogenetics, NINDS; telephone: 301-496-5745; email: [jp477n@nih.gov](mailto:jp477n@nih.gov). For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAR-08-228.html> or <http://grants.nih.gov/grants/guide/pa-files/PAR-08-229.html>.<sup>NIH</sup>